

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International publication date  
6 January 2005 (06.01.2005)

PCT

(10) International publication number  
WO 2005/000613 A1

(51) International patent classification<sup>7</sup>: B60H 1/00

(21) International application number: PCT/EP2004/006636

(22) International filing date: 18 June 2004 (18.06.2004)

(25) Language of filing: German

(26) Language of publication: German

(30) Data relating to the priority:  
103 29 582.8 30 June 2003 (30.06.2003) DE

(71) Applicant (for all designated States except US): BEHR  
GMBH & CO. KG [DE/DE]; Mauserstrasse 3, 70469 Stuttgart  
(DE).

(72) Inventors; and

(75) Inventors/Applicants (US only): KIEL, Ronny [DE/DE];  
Matthias-Grünewald-Str. 22, 70771 Leinfelden-Oberaichen

(DE). MÖLLERT, Thorsten [DE/DE]; Roter Stich 139,  
70376 Stuttgart (DE). LARPENT, Stéphanie [FR/DE];  
Weberstrasse 86, 70182 Stuttgart (DE).

(74) Joint Representative: BEHR GMBH & CO. KG;  
Intellectual Property, G-IP, Mauserstrasse 3, 70469  
Stuttgart (DE).

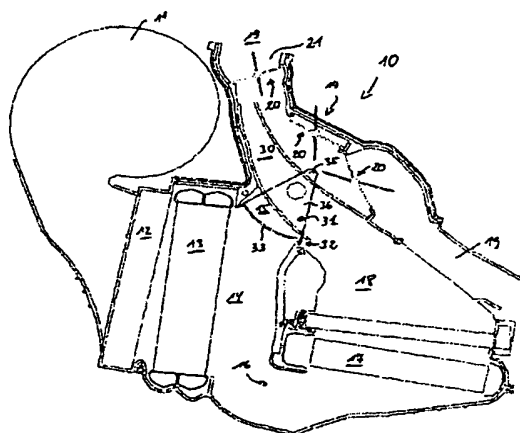
(81) Designated states (unless otherwise indicated, for  
every kind of national protection available): AE, AG,  
AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY,  
BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC,  
EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,  
IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,  
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,  
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ,  
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[continued on next page]

as printed

(54) Title: AIR-CONDITIONING DEVICE FOR VEHICLES AND METHOD FOR THE OPERATION OF AN AIR-CONDITIONING DEVICE

(54) Bezeichnung: KLIMATISIERUNGSEINRICHTUNG FÜR FAHRZEUGE SOWIE VERFAHREN ZUM BETREIBEN EINER KLIMATISIERUNGSEINRICHTUNG



WO 2005/000613 A1

(57) Abstract: The invention relates to an air-conditioning device and to a method for the operation of an air-conditioning device. The aim of the invention is to improve current air-conditioning devices such that a desired level of temperature inside the motor vehicle changes as little as possible and the windows are kept mist-free. As a result, each bypass channel, which guides the heat exchanger to an air outlet channel, is associated with a mixing flap in order to control the warm air flow passing through the bypass channel.

[continued on next page]

(84) **Designated states** (unless otherwise indicated, for every kind of regional protection available): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- With International Search Report.
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

*For an explanation of the two-letter codes and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette.*

**Declaration under Rule 4.17:**

- of inventorship (Rule 4.17(iv)) for the following designation US

---

(57) **Zusammenfassung:** Die vorliegende Erfindung betrifft eine Klimatisierungseinrichtung sowie ein Verfahren zu betreiben einer Klimatisierungseinrichtung. Aufgabe der Erfindung ist es, Klimatisierungseinrichtungen dahingehend zu verbessern, dass durch das Aufrechterhalten beschlagfreier Scheiben eine gewünschte Temperaturschichtung im Fahrzeuginnenraum möglichst wenig gestört wird. Erfindungsgemäss ist dabei vorgesehen, dass jedem Bypasskanal, der von dem Wärmetauscher in einen Luftaustrittskanal führt, eine Mischklappe zum Steuern des Warmluftstromes durch den Bypasskanal zugeordnet ist.